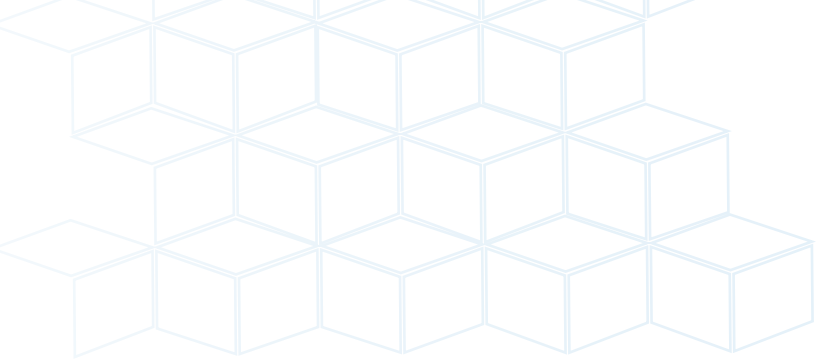**WHITE PAPER:**

Collaborative Data Governance
Fosters Reliable Analytics,
Organizational Improvements

INTRODUCTION

Whether healthcare organizations are enthusiastically embracing value-based care or cautiously exploring the feasibility of risk-based financial arrangements, executive leaders are finding themselves under increasing pressure to make their enterprises more effective, efficient, and able to pivot quickly in response to unpredictable changes in the industry.

The challenges of making confident decisions in such an uncertain environment are magnified by healthcare's big data catch-22: organizations cannot make informed choices about their strategic initiatives without access to timely, accurate, and trustworthy data, yet for many enterprises, the first big decision they have to make is how to get the data they need to chart the best possible course into the future.

The ability to access, analyze, and report upon big data is starting to become a near mandatory competency for organizations that acknowledge the pressing need to improve care delivery, quality, safety, cost, and the patient experience.

But it can be difficult to find the right entry point into this complex process. Organizations must carefully weigh the benefits of implementing new technologies to meet their high priority goals—and of equal importance, they must objectively assess and improve their governance processes to avoid falling into the trap of having plenty of raw data yet little actionable insight.

Supporting organizational decision-making with good data and better governance

"Organizations should begin the improvement process by defining their business imperatives and then matching their analytics goals to those objectives, not the other way around," says George Dealy, Vice President of Healthcare Solutions at Dimensional Insight®.

Those goals may be clinical, administrative, or financial — and often they will cross the lines between these areas of operations, leaving executive leaders with the challenge of crafting a decision-making team that can work collaboratively across multiple domains.

Chief information officers (CIOs) and chief medical information officers (CMIOs) are well positioned to facilitate these efforts. Combined with strong input from the owners of the particular service lines involved in each project, the technical savvy of a CIO can help the organization understand how to balance its long-term visions with the real-world opportunities of available health IT infrastructure tools.

However, because some types of data are more immediately accessible, the goal-setting process may initially feature some voices more strongly than others.

"The inequality of data access can cause some tough problems," said Dealy. "Financial data tends to be the most easily available, because it's the most quantifiable and is often generated in a highly standardized manner."

"That means that the chief financial officer can be in a better position to state his case than the Chief Medical Officer, who may not have the data to justify, in concrete terms, why she is requesting a new analytics solution to meet one of the organization's strategic population health management needs."

Organizations facing this dilemma may find that they have jumped into the decision-making process at an incorrect juncture, and must reassess their basic abilities to support the rationale for certain goals before they can begin to generate insights that will guide the implementation of new strategies.

Oftentimes, the CIO is the ideal candidate to help leadership review the enterprise's existing competencies, build the technical foundations for using data to support shrewd decisions, and develop new business rules and measurements that can be applied to future uncertainties.

When executive leaders strive to place meaningful data insights at the core of the organization's strategic roadmap, they are laying a solid foundation for the governance process.

Creating a governance structure that engages all relevant stakeholders

A comprehensive and detailed governance process is required to support the ongoing cultivation of best practices throughout the entire life cycle of a technology implementation or quality improvement initiative.

In the healthcare industry, the term "governance" is used to describe both the overarching structure of decision-making in an enterprise and the detailed aspects of ensuring that data is created cleanly, utilized appropriately, protected adequately, and is well understood.

For any of these processes to succeed, organizations must understand how to develop collaborative communication skills that allow all stakeholders to contribute their expertise in an equitable and methodical manner.

When it comes to using data in healthcare, most organizations are informally divided into three major groups: the IT department; the subject matter experts (SMEs) and service line owners; and the clinical, executive, or administrative end-users who rely on the output of the other two groups in order to succeed with their objectives.

For many organizations, measure development and data analytics processes are still rooted in the IT department. What can be done with the infrastructure resources at hand is still often the primary driver of what ends up implemented in the end-user environment, regardless of whether or not the strategy is optimized for the future of the enterprise.

In addition to constraining an organization's long-term vision, this approach puts a significant amount of pressure on the IT department to own the entire process of generating actionable clinical, financial, or operational insights.

It also requires SMEs and end-users to constantly refer their queries to IT whenever they have a need to adjust or develop a new process or measure. This back-and-forth puts undue pressure on developers, creates data access bottlenecks, and results in friction across the organization.

Instead of relying wholly on the IT department to validate measures, integrate subject matter knowledge, and meet the ever-changing needs of end-users, organizations should use innovative governance strategies to more effectively engage each stakeholder in the area of development that best matches their skills and expertise.

"The resources and talents of IT are absolutely essential for getting the information out of the systems where it resides and pulling it in from outside the walls of the organization," Dealy stated. "But once the data is extracted, cleansed, and put into a format that is usable for analytics, you can shift the process to the subject matter experts and reallocate your scarce IT resources to other essential tasks."

Placing SMEs and end-users in charge of cultivating the organization's knowledge base and business rules can produce more effective measures with fewer endless email chains and stagnant ticket queues.

"A knowledge base isn't just created once," Dealy pointed out. "It's is a living, breathing thing that has to be continually adapted to changing requirements."

A simple and seamless governance process can guide continual development, ensuring that the people who know how to shape the data and the users who rely on the data are prepared to contribute their skills in a meaningful way.

Successfully implementing this approach may require an investment in a system that can easily track the flow of ideas, collect relevant metadata, and ensure that all stakeholders agree about what the metric is actually measuring—and how it does so.

Reliable and comprehensive metadata is just as important as quantitative transactional data for defining terms and formulas that are used to measure efficiency and quality.

Organizations must be confident that every department is defining important terms in the same way so that performance can be measured equally and consistently across the entire system.

Length of stay is a key performance indicator for most hospitals, yet stakeholders may be using different criteria for admission and discharge or may disagree about whether calculating length of stay using the mean or median is the best indicator of quality.

Capturing the details of the governance process in a centralized manner ensures that organizations develop a clear record of how a decision was made in addition to what that decision means for a particular strategic objective or improvement initiative.

"Healthcare's grappling with a big data Catch-22, where organizations are hesitant to trust the information that's fueling their strategic decision making. Having a data governance capability in place is the best way to overcome these hesitations," said Fred Powers, co-founder and CEO of Dimensional Insight.

"With the launch of Measure Factory, customers are now able to leverage data that is built from consistent and validated business rules, allowing for a better understanding of the numbers and greater acceptance and collaboration across business functions."

This consistency allows providers to replicate their successes—and avoid repeating any previous missteps—while democratizing the decision-making process and leveraging the knowledge of experts without overburdening any of the enterprise's stakeholders.

Using Measure Factory® to cultivate a dynamic organizational knowledge base

Measure Factory from Dimensional Insight automates and accelerates many of the processes associated with developing effective analytics, fostering trust in business rules, and creating a single version of truth agreed upon by all participating stakeholders.

"Transforming raw data into useful and meaningful information is traditionally quite labor-intensive and dependent on skills possessed by scarce resources," said Dealy.

"Automating that by taking the programming component out of the process as much as possible means that subject matter experts, who have clinical and informatics knowledge, but not necessarily coding skills, can engage more fully in defining the requirements that make sense for them and their users."

In addition to offering a set of pre-defined measures to jumpstart the decision-making process, the module allows organizations to collect and curate all its relevant metadata and transactional data in one place. This helps teams collaborate to develop a comprehensive knowledge base that can fuel optimization initiatives and fine-tune measures to meet the organization's actual definitions.

Stakeholders are then able to review existing processes; explore the formulas, definitions, and data involved in constructing each measure; and easily collaborate with colleagues to clarify concerns or suggest improvements.

"Any successful data governance initiative requires a culture change to take place first and foremost, which was the exact case for our organization. It can be frustrating to ask for one number and to get four different numbers back from different people," said Ken Arnold, analytics manager at Covenant HealthCare, based in Saginaw, Michigan.

"Measure Factory lets our team members quickly determine what the source of truth really is, and allows them to come to a consensus on the data's meaning and what it how it impacts our business strategy moving forward."

Combining the processes of governance and analytics is key for fostering transparency, ensuring accuracy, and preventing confusion.

"Measure Factory provides us with consistent definitions of measures—this standardization is critical to the success of our business intelligence deployment," added Brent Bishop, assistant vice president of strategic planning and business development at Canton-Potsdam Hospital, based in Potsdam, NY.

"By ensuring data integrity, Measure Factory allows us to use our measures throughout the organization, and we know that employees—regardless of their department or role—are all talking about the same number in the same way."

A measure dictionary, which is an organizational dictionary of measures and related information, such as rules, definitions, and reference sources, ensures that the entire organization has access to precise definitions for each key performance indicator or quality benchmark and reduces the need to recalculate or justify the same data over and over again.

For organizations participating in value-based care initiatives or risk-based reimbursement programs, accessing accurate measures and clear definitions internally can also put providers in a stronger position to negotiate advantageous quality and performance benchmarks with payers.

"If you subscribe to the idea that data-driven, evidence-based decision-making is the foundation of a successful organization, you need to make sure that good data presented in meaningful ways is available to everyone in the enterprise who is expected to rely on it," said Dealy. "The better you can do that, the more effectively your organization will operate."

CONCLUSION

Reducing inaccuracies and disagreements across the analytics development process can ensure a smooth progression from raw data to actionable insights at both the executive level and in the day-to-day experiences of clinical and administrative end-users.

Consistency breeds clarity, which in turn allows organizations to collaborate more effectively and reach their performance and sustainability goals sooner.

By removing pressure from the IT department and better engaging SMEs and end-users in the governance discussion, organizations can improve efficiency and maximize the impact of their limited resources and improve the usefulness of the organization's key information assets.

Measure Factory offers a practical and comprehensive way to build confidence in the enterprise's knowledge base while standardizing the complex business rules that drive all healthcare organizations.

Investing in the tools and strategies that create a cooperative governance environment can help organizations position themselves for success in a rapidly changing industry as they plan their strategic investments, set clinical and administrative goals, and take on the many challenges of value-based healthcare reform.

CannaBI Analytics® is powered by Dimensional Insight.

ABOUT **DIMENSIONAL INSIGHT**

Dimensional Insight® is a leading provider of analytics, data management, and performance management solutions, offering a complete portfolio of capabilities ranging from data integration and modeling to sophisticated reporting, analytics, and dashboards. The company is a seven-time Best in KLAS winner in healthcare business intelligence and analytics, most recently ranking #1 in 2020. Founded in 1989, Dimensional Insight has thousands of customer organizations worldwide. Dimensional Insight consistently ranks as a top performing analytics organization by customers and industry analysts in its core market segments including healthcare, manufacturing, and beverage alcohol.

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